

Art Unit: 2829

10/035,508

SD

09/17/04

1. (Currently Amended) A method of testing a circuit on each of a plurality of separate substrates, comprising:

placing the plurality of separate substrates in a transfer apparatus, each substrate including a plurality of ~~[[separate]]~~ dies;

securing the substrates to a test chuck so that the substrates are held by the test chuck;

~~[[moving]]~~ bringing terminals on at least one of the ~~[[separate]]~~ dies of each of the substrates into contact with contacts connected to an electric tester to electrically connect the circuit of the substrate through the terminals and the contacts to the electric tester;

relaying signals through the terminals and the contacts between the electric tester and the circuit;

disengaging the terminals from the contacts; and

removing the substrate from the test chuck.

2. (Original) The method of claim 1 wherein the transfer apparatus is a transfer chuck, a plurality of substrates are simultaneously located in the transfer chuck, surfaces of the test chuck are brought into contact with each substrate, each substrate is secured to the test chuck, moving of the test chuck relative to the transfer chuck moving the substrates simultaneously off the transfer chuck and simultaneously past the image recordation device to record an image of a surface of each substrate.

3. (Original) The method of claim 2 wherein opposing edges of each substrate are lodged on two respective horizontal ledges and the surfaces of the test chuck move upward in between the ledges into contact with the substrates to lift the substrates from the ledges, whereafter the surfaces of the test chucks move in a horizontal direction to move the substrates off the transfer chuck.

4. (Original) The method of claim 2 wherein the substrates are secured to the transfer chuck by applying a vacuum to an opening extending into the surfaces of the test chuck.

5. (Original) The method of claim 1 wherein successive sets of terminals on the substrate are brought into contact with and disengaged from the contacts successively one after another.

6. (Original) The method of claim 2 wherein the substrates are removed from the test chuck by:

moving the test chuck relative to the transfer chuck so that the substrates move onto the transfer chuck;

disengaging the substrates from the test chuck; and

moving the surface of the test chuck away from the substrates so that the substrates are again held by the transfer chuck; and

removing the substrates from the transfer chuck.

7. (Original) The method of claim 2 wherein the transfer chuck has a plurality of slots, each holding a respective one of the substrates.

8. (Previously Presented) The method of claim 2 further comprising:

simultaneously heating or cooling the substrates while held by the transfer chuck.

9. (Original) The method of claim 8 wherein the substrates are heated or cooled by a thermal conditioning chuck on which the substrates are located.

10. (Original) The method of claim 8 wherein the transfer chuck is moved horizontally after heating or cooling of the substrates so as to move the substrates away from the thermal conditioning chuck.

11. (Original) The method of claim 9 wherein surfaces of the thermal conditioning chuck are moved toward the substrates before being heated or cooled, and moved away from the substrates after the substrates are heated or cooled.

12. (Original) The method of claim 11 wherein the transfer chuck has a plurality of ledges, opposing edges of each substrate being located on a respective pair of the ledges, the surfaces of the thermal conditioning chuck being inserted between each respective pair of ledges while moving toward the substrates.

CLAIMS 13 THROUGH 24 ARE CANCELLED